

PHASES	HADDON MATRIX FACTORS			
	HUMAN	VEHICLES AND EQUIPMENT	ENVIRONMENT	
			PHYSICAL ENVIRONMENT	SOCIO-ECONOMIC ENVIRONMENT
PRE-INJURY PHASE	<ul style="list-style-type: none"> • Age • Gender • Years of experience • Sight • Hearing ability • Personality • Driving record • Alcohol/substance use • Familiarity with roads (potential hazards) • Level of distraction (cell phone use) 	<ul style="list-style-type: none"> • Vehicle upkeep/repairs • Safety features present (air bags, rollover protection, etc.) • Aerodynamics • Speed capacity • Size/type of vehicle 	<ul style="list-style-type: none"> • Road shape (straight vs. winding) • Weather conditions/seasonal • Trees • Speed limit • Traffic 	<ul style="list-style-type: none"> • Perception of seatbelt use • Employer enactment and enforcement of safety rules • Positive safety culture • Driving alone or with other workers
INJURY PHASE	<ul style="list-style-type: none"> • Familiarity of agent and environment • Seatbelt use • Previous experience /training (crashes, traumatic experiences) 	<ul style="list-style-type: none"> • Equipment working (brakes) • Handling ability • Speed 	<ul style="list-style-type: none"> • Weather conditions/seasonal • Hills, ditches • Obstacles (Trees, other vehicles, etc) 	<ul style="list-style-type: none"> • Enforcement of wearing seatbelts • Up-to-date safety features available for equipment • Ability of witnesses to help or get help • First response training
POST-INJURY PHASE	<ul style="list-style-type: none"> • Pre-existing conditions/genetics • Age (resilience) • Attitude/Motivation • Participation in recommended therapies 	<ul style="list-style-type: none"> • Removal from scene 	<ul style="list-style-type: none"> • Geography • (ditch, lake, mountain) 	<ul style="list-style-type: none"> • Rural/Urban • Emergency response • (time, training level) • Insurance coverage (health, motor vehicle) • Perception of lawsuits
TOTAL LOSSES/COSTS	<ul style="list-style-type: none"> • Wages lost • Medical expenses • Survivor mental health issues • Years of life lost • Death 	<ul style="list-style-type: none"> • Equipment damage • Damage to obstacles • Injury to others • Administrative expenses 	<ul style="list-style-type: none"> • Damage to/loss of obstacle • (tree, sign) • Unsightly scene • Time/space in hospital 	<ul style="list-style-type: none"> • Loss of productivity • Medical system costs • Consequences from litigation • Social stigma